

**Model Integrated Pest Management (IPM) Contract  
Specifications  
For Commercial Pest Control Services**

**Ornamental & Turf  
Arborist (Tree Care)**



**State of Connecticut  
Department of Environmental Protection  
Pesticide Management Program  
79 Elm Street  
Hartford, CT 06106  
(860) 424-3369**

**Arthur J. Rocque, Jr., Commissioner**

The Department of Environmental Protection has developed this model contract to assist with the development of comprehensive integrated pest management programs at state departments, agencies and institutions as outlined in Connecticut General Statutes Section 22a-66l. Integrated Pest Management (IPM) is defined as the use of all available pest control techniques including judicious use of pesticides, when warranted, to maintain a pest population at or below an acceptable level, while decreasing the unnecessary use of pesticides.

The primary goal of IPM is to reduce the amounts of pesticides applied by using alternative methods of pest control which may include general maintenance, sanitation and mechanical or biological control. These methods will help to eliminate conditions that are favorable to pest infestation, making their survival more difficult.

Please consult with your pest control provider or the DEP Pesticide Management Program for technical assistance if needed.

Section 22a-66l of the Connecticut General Statutes states:

- (a) Each state department, agency or institution shall use integrated pest management at facilities under its control if the Commissioner of Environmental Protection has provided model pest control management plans pertinent to such facilities.
- (b) Each state agency which enters into a contract for services for pest control and pesticide application may revise and maintain its bidding procedures to require contractors to supply integrated pest management services.
- (c) The Commissioner of Environmental protection shall annually review a sampling of state department, agency or institution pest control management plans required by regulations adopted under section (e) of this section and may review any application of pesticides to determine whether a state department agency, or institution acted in accordance with subsection (a) of this section.
- (d) The Commissioner of Environmental Protection may provide model pest control management plans which incorporate integrated pest management for each appropriate category of commercial pesticide certification which it offers. The commissioner shall, within available resources, notify municipalities, school boards, and other political subdivisions of the state of the availability of the model plans for their use. The Commissioner of Environmental Protection shall consult with any state agency head in the development of any such plan for properties in the custody or control of such agency head.
- (e) The Commissioner of Environmental Protection, in consultation with the Commissioner of Public Health, shall adopt regulations in accordance with the provisions of chapter 54 establishing requirements for the application of pesticides by any state department, agency or institution. Such regulation shall include provisions for integrated pest management methods to reduce the amount of pesticides used. Notwithstanding the provisions of this section and any regulations adopted under this section, a pesticide may be applied if the Commissioner of Public Health determines there is a public health emergency or the Commissioner of Environmental Protection determines that such application is necessary for control of mosquitoes.
- (f) The Commissioner of Environmental Protection shall develop and implement a program to inform the public of the principles of integrated pest management and to encourage its application in private properties.

The Department of Environmental Protection is an equal opportunity/affirmative action employer, offering its services without regard to race, color, regional/national origin, age, sex or disability. In conformance with the Americans with Disabilities Act, the DEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities needing auxillary aids or services should call (860) 424-3000.

**MODEL INTEGRATED PEST MANAGEMENT (IPM)  
CONTRACT FOR COMMERCIAL PEST CONTROL SERVICES**  
Ornamental & Turf  
Arborist (Tree Care)

**1. GENERAL**

***a. Description of Service***

This contract is part of a comprehensive Integrated Pest Management (IPM) program for the all areas specified herein. The goal of IPM is to deliver effective pest control while at the same time reducing the volume and toxicity of pesticides used and human and environmental exposure to pesticides. IPM is a process for achieving long term, environmentally sound pest control through the use of a wide variety of technological and management practices. Control techniques in an IPM program include a combination of pest monitoring, good sanitation practices, education, grounds maintenance, alternative physical, mechanical, and biological pest control, and the use of pesticides when warranted according to a predetermined hierarchy of pest management choices, formulations, and application techniques, which will minimize the exposure and potential risk to people and the environment.

The contractor shall furnish all supervision, labor, materials and equipment necessary to accomplish the surveillance, trapping, and pesticide application components of the IPM program. The Contractor shall also provide detailed, site-specific recommendations for procedural modifications that may be necessary to achieve pest prevention.

***b. Requirements for Bidding***

In order for a company to qualify for the bidding process, it must meet the following requirements:

- (1) Possess a valid commercial pesticide application business certificate of registration from the Connecticut Department of Environmental Protection;
- (2) Employ a minimum of one certified commercial supervisory applicator for every five certified commercial operational applicators employed;
- (3) Provide proof of appropriate insurance;
- (4) Provide three references attesting to the company's knowledge or experience in the field of IPM.

***c. Pests Included and Excluded***

The Contractor shall adequately suppress populations of undesirable weeds, insects that feed primarily on or may otherwise cause harm to outdoor vegetation, herbaceous diseases and ticks.

Populations of the following pests will be considered special services, separate from the specifications of this contract:

- Birds, bats, snakes, commensal rodents and all other vertebrates;
- Mosquitoes and other free flying insects;
- General pest control within structures;
- Termite & Wood Destroying Organisms;
- Fleas and ants

***d. Initial Inspection***

The Contractor shall conduct a thorough, initial inspection of the entire site within ***ten (10)*** working days after ***a purchase order has been issued***. The purpose of the initial inspection is for the Contractor to identify problem areas and any equipment, landscape features, or management practices that are contributing to pest infestations. Soil samples shall be collected and sent for analysis to determine the need for any soil amendments necessary to correct pH and/or fertility. The initial inspection shall be conducted by a certified commercial supervisory applicator employed by the Contractor.

Access to the site shall be coordinated with the Contracting Officer's Representative (COR). The COR will inform the Contractor of any restrictions or areas requiring special scheduling.

Ideally, the COR should have oversight of maintenance staff to ensure that sanitation practices and maintenance procedures associated with proper pest control are accomplished, and should interact with all facility staff members to ensure that pest sightings and other pest control related items are promptly brought to the attention of the Contractor.

***e. Pest Control Plan***

Prior to initiation of service, the Contractor shall submit to the COR a written Pest Control Plan for the site within ***ten (10)*** working days following the initial inspection. Upon receipt of the Pest Control Plan, the COR will render a decision regarding its acceptability within ***ten (10)*** working days. If aspects of the Pest Control Plan are incomplete or disapproved, the Contractor shall have ***five (5)*** working days to submit revisions. The Contractor shall initiate services outlined in the terms and conditions of the contract following notice of approval.

The Pest Control Plan shall include:

- (1) Proposed methods for control, including labels and Material Safety Data Sheets (MSDS) for all pesticides to be used. A list of types of rodent bait boxes, pest monitoring devices, and any other control devices or equipment should also be included;
- (2) A proposed pest population level referred to as a predetermined tolerance threshold, if thresholds exist for the targeted pest;
- (3) A service schedule for the site;
- (4) A description of any operational changes that would facilitate the pest control effort;
- (5) A copy of the Commercial Pesticide Applicator Certificate for every Contractor's representative who will be performing on-site service under contract.
- (6) A description of the Contractor's Quality Control Program as described in Section Five of this document.
- (7) Any additional information as required by RCSA Sec. 22a-66l-1. Application of pesticides by State Agencies. (See Appendix A)

It shall be the Contractor's responsibility to carry out work according to the approved Pest Control Plan for the site. The Contractor shall receive approval of the COR prior to implementing any changes to the approved Pest Control Plan, including additions or replacements to the pesticide list and to on-site service personnel.

***f. Pesticide Application***

The Contractor shall not apply any pesticide product that has not been included in the Pest Control Plan or approved in writing by the COR. The COR will make a timely decision on any matter that requires a written approval.

Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides shall not occur unless visual inspections or monitoring devices

indicate the presence of pests in that specific area.

Preventive pesticide treatments of areas determined to be at high risk for infestation by weeds, insects or disease, through inspection at the onset of the program or as part of a maintenance program, are acceptable. These applications must be conducted in accordance with the pesticide use hierarchy found in section 2 WEED, INSECT AND DISEASE CONTROL of this document.

The Contractor shall not store any pesticide product on the property of the contractee.

***g. Employing Best Management Practices***

***Turf - Soil fertility and pH***

The Contractor is expected to utilize best management practices at all times to maintain turf health and appearance. Prior to the application of any fertilizer or pesticide, composite soil samples will be collected and analyzed for pH and fertility. The Contractor will be expected to perform soil sampling on an annual basis throughout the term of the contract, either in late fall or early spring when the frost has left the ground. The Contractor will be responsible to apply amendments to the soil as recommended by the soil analysis reports. Organic fertilizers should be used whenever possible, otherwise, fertilizer with 50% slow release nitrogen shall be used. Fertilizer applications are to be performed when grasses are actively growing, usually late May/early June and late August/early September. Fertilizer applications will not exceed 2 1/2 pounds of nitrogen per 1000 square feet unless soil sample analysis reports indicate a necessity to further amend the soil.

The Contractor will be responsible for mowing turf grass to a height of 2"-3" on a schedule that is frequent enough to avoid clumping of grass clippings. Clippings will remain on the lawn and allowed to degrade. The Contractor will be responsible for the removal and proper disposal of grass clippings if the mowing schedule is not maintained and results in excessive grass clippings being deposited on the lawn area.

***Weed Control***

Herbicide applications are not to be relied upon as a sole method of controlling weeds. Proper cultural practices are to be employed to encourage dense, healthy turf which will help to prevent the germination of weed seeds and survival of seedlings. The Contractor will be required to perform spot applications of herbicide on an as needed basis to small or limited areas. Widespread applications of broadleaf herbicides may be required in areas where invasive weed species have invaded greater than 25% of the total turf area. Widespread applications of pre-emergent herbicides may be necessary to control invasive annual grasses.

Pre-emergent applications of herbicide may be necessary in flowerbeds and areas of formal landscaping.

### ***Insect and Disease Control***

A certified supervisor employed by the Contractor will be expected to conduct visual inspections monthly, April through September, to monitor for evidence of destructive turf pests and conduct additional sampling as necessary to confirm the presence of such pests. Applications of insecticide to turf areas are to be limited to locations where unacceptable levels of activity have been identified in an effort to preserve populations of beneficial insects and nematodes.

### ***Silviculture - Arboriculture Practices***

The Contractor will be expected to utilize best management practices for the management of all trees on site. A licensed Arborist employed by the company will be expected to annually assess soil conditions to identify any potential problems that may cause harm to trees such as soil compaction, contamination, trenching or digging in the vicinity of the tree.

The Contractor shall develop a schedule of monitoring for pest problems, using appropriate monitoring techniques, based upon growing degree days, tree species on site and the likelihood that pest problems will arise. Visual inspections should also be conducted during routine maintenance activities.

Bark mulch shall be placed at a depth no greater than 2-3" and tapered to a shallow depth around the base of trees to reduce weed growth and retain moisture. Mulch beds shall be restored annually throughout the term of the contract. Black plastic mulch is not to be used.

The licensed Arborist shall be responsible for implementing a program of pruning, hazard management, cabling, bracing and treatment of wounds that is appropriate for the long-term goals of the facility and consistent with accepted arboriculture practices. The Contractor will be responsible for removing pruned and/or fallen branches from the site.

### ***Insect and Disease Control***

In an effort to preserve beneficial and predatory insects, pesticides shall be applied only when the presence of harmful pests or disease have been identified through monitoring and it is anticipated that more than 15% of discoloration, defoliation or damage to the total leaf area will likely occur. Pesticide applications shall be limited only to infested trees.

Preventive pesticide applications may be performed only to areas where the previous or current year's monitoring has indicated the presence of harmful insect pests or if certain tree species, prone to specific insect problems are present. Preventive applications shall be made only to specific problem areas.

The licensed Arborist will be responsible to estimate the levels of aesthetic injury that can be anticipated by utilizing their professional experience and considering the species and densities of pests found during monitoring.

### ***General Requirements***

The Contractor will be expected to perform spring and fall clean-up (April & November) by raking and removal of leaves, branches and other debris to maintain the appearance of the property. Materials are to be removed from the premises on the days that clean-up activities are performed.

#### ***h. Record Keeping***

The Contractor shall be responsible for maintaining a pest control logbook or file for each site specified in this contract. These records shall be kept on the property of the contractee and maintained on each visit by the Contractor.

Each logbook or file shall contain at least the following items:

- (1) A copy of the Pest Control Plan for the site, including labels and MSDS sheets for all pesticides which may be used, and the Contractor's service schedule for the facility;
- (2) The Pesticide Application Record and IPM Monitoring Form will be supplied to the Contractor by the COR, and will be used to document the performance of all work, including emergency work. Upon completion of each service visit to the site, the Contractor's representative performing the service shall complete, sign and date the form, and return it to the logbook or file on the same or succeeding day of the services rendered.

The Contractor's representative shall provide recommendations in writing whenever appropriate as to what steps the facility must take to reduce or eliminate conditions that are favorable for pests covered by the terms of the contract.

- (3) Copies of soil test analysis reports.
- (4) Maps or graphs indicating the placement of insect monitoring devices and/or rodent bait boxes.



*i. **Contractor Personnel***

Throughout the life of this contract, all Contractor personnel providing on-site pest control service must meet state requirements for training and certification as Commercial Pesticide Applicators. Uncertified individuals working under the supervision of a Certified Applicator will not be permitted to provide service under the terms of this contract.

*j. **Manner and Time to Conduct Service***

The Contractor shall perform routine services that do not adversely affect occupant health or productivity during the regular hours of operation in the buildings. No pesticides may be applied when the immediate area to be treated is occupied. When it is necessary to perform work outside of the regularly scheduled hours set forth in the Pest Control Plan, the Contractor shall notify the COR at least one day in advance.

The Contractor shall observe all safety precautions throughout the performance of this contract. Certain areas within some buildings may require special instructions for persons entering the building. Any restrictions associated with these special areas will be explained by the COR. The Contractor shall adhere to these restrictions and incorporate them into the Pest Control Plan for the specific building or site.

All Contractor personnel working in or around buildings designated under this contract shall wear distinctive uniform clothing. The Contractor shall determine and provide additional personal protection equipment required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to Occupational Safety and Health Administration (OSHA) standards for the products being used.

*k. **Special Requests and Emergency Service***

On occasion, the COR may request that the Contractor perform corrective, special, or emergency service (s) that are beyond routine service requests. The Contractor shall respond to these exceptional circumstances and complete the necessary work within one (1) working day after receipt of the request. In the event that such services cannot be completed within one working day, the Contractor shall immediately notify the COR and indicate an anticipated completion date.

**2. WEED, INSECT AND DISEASE CONTROL**

*a. **Non-pesticide Products and Use***

The Contractor shall use non-pesticide methods of control wherever possible and economically feasible.

***b. Pesticide Products and Use***

The goal of IPM is to deliver effective pest control while at the same time reducing the volume and toxicity of pesticides used and human and environmental exposure to pesticides. When it is determined that a pesticide must be used in order to obtain adequate control, the Contractor shall employ the use of formulations and treatment techniques which minimize the amount of pesticides used and the potential exposure of people and the environment.

The Contractor shall be responsible for application of pesticides according to the product label. All pesticides used by the Contractor must be registered with the Environmental Protection Agency (EPA) and the state Department of Environmental Protection. Transport, handling and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable federal and state laws and regulations.

The Contractor will use the following pesticide use hierarchy as a guide to minimize the amounts of pesticides applied as well as the potential for exposure.

(1) Biological Pesticides

(2) Insecticidal Soaps/Horticultural Oil

(3) Spot treatments - As differentiated from overall, broadcast, or complete coverage, spot treatment is application to localized or restricted areas no more than (2) square feet where weeds, insects or disease are present.

(a) Wettable powders

(b) Microencapsulated products

(c) Emulsifiable concentrates

(d) Tree or Soil Injected Systemics

(4) Granular pesticides

(5) General sprays

(6) Fogging or Aerosolized Sprays

Application of pesticides shall be restricted to situations where no alternative measures which will result in timely control within the predetermined tolerance thresholds, are practical. In the event that these applications become necessary, a formulation with the

least potential for exposure will be chosen. As a general rule, biologicals, insecticidal soaps, horticultural oil, wettable powder and microencapsulated formulations will be considered as first choices. Solvent-based pesticides will be used only as a last resort when no other effective alternatives exist. All application shall be made only to areas unoccupied at the time of application and shall remain unoccupied until the treated areas have dried, or longer if the label specifies a longer re-entry time. The Contractor and COR will determine, on a case-by-case basis, if any pre-notification is needed.

The Contractor shall obtain the approval of the COR prior to any widespread application of pesticide. The Contractor shall take all necessary precautions to ensure occupant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application. No applications shall be made while persons other than those employed by the Contractor are present in the area to be treated.

### **3. USE OF RODENT BAIT BOXES/TICK CONTROL**

#### ***Pesticide Products and Use***

In circumstances when rodent bait boxes are deemed essential to treat mice for adequate control of deer ticks, the Contractor shall obtain the approval of the COR prior to their use.

All untreated rodent baits and accompanying pesticide, regardless of packaging, shall be placed either in locations not accessible to children, pets, wildlife, and domestic animals, or in EPA-approved tamper-resistant bait boxes.

Frequency of servicing bait boxes shall depend upon the level of rodent activity. All bait boxes shall be maintained in accordance with EPA regulations and the Connecticut Pesticide Control Act. The Contractor shall adhere to the following five points:

- (1) All bait boxes, whenever possible, shall be placed out of the general view and in locations where they will not be disturbed by routine operations;
- (2) The lids of all bait boxes shall be securely locked or fastened shut;
- (3) All bait boxes shall be securely attached or anchored to the floor, ground, wall or other surface, to discourage movement by non-authorized personnel;
- (4) Untreated bait and accompanying pesticides shall always be placed in the baffle-protected feeding chamber of the box and never in the runway of the box;
- (5) All bait boxes shall be labeled with the Contractor's business name and address, and dated at the time of installation and each servicing.

**4. PROGRAM EVALUATION**

The contracting agency reserves the right to evaluate the progress of this contract in terms of effectiveness and safety, and to require such changes as necessary. The Contractor shall take prompt action to correct all identified deficiencies.

**5. QUALITY CONTROL PROGRAM**

The Contractor shall establish a complete quality control program to assure the requirements of the contract are provided as specified. Within five (5) working days prior to the starting date of the contract, the Contractor shall submit a copy of their program to the COR. The program shall include, but not be limited to the following:

- a. An inspection system covering all the services stated in this contract. A checklist used in inspecting contract performance during regularly scheduled or unscheduled inspections. The name (s) of the individuals (s) who will perform the inspections;
- b. The checklist shall include every area of the operation serviced by the Contractor as well as every task required to be performed;
- c. A system for identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable;
- d. A file of all inspections conducted by the Contractor and the corrective actions taken. This documentation shall be maintained locally and made available upon request.

**6. PERFORMANCE - LESS THAN SATISFACTORY RATING**

The contractor, upon receiving two "less than satisfactory" ratings of the same nature in the same treatment area, must document all procedures done, to date, and establish the extent of the pest level. If the pest levels are outside the predetermined tolerance thresholds (if thresholds exist for the given pest), the Contractor shall have five (5) days to submit to the COR an acceptable recommendation to alleviate the unsatisfactory situation.

Any treatment area receiving three consecutive "less than satisfactory" ratings of the same nature may result in the filing of a formal complaint from the COR to the Contracting Agent with intent to terminate the contract. The Contractor will not be terminated if the "less than satisfactory" rating is a result of circumstances outside of the Contractor's control, such as failure of the COR to make operational changes that would facilitate the pest control effort.

**7. SAFETY AND HEALTH**

- a. All work shall comply with all applicable state and federal safety and health requirements. Where there is a conflict between applicable regulations, the most stringent will apply.
- b. The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

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